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Chang Hcui Hong

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LEE, HONG, DEGERMAN, KANG & SCHMADEKA

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EXAMINER

WANG, JIN CHENG

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/603,451

Applicant(s)

HONG, CHANG HEUI

Examiner

Jin-Cheng Wang

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Amendment***

Applicant's submission filed on 7/11/2007 has been entered. Claims 1-50 have been canceled. Claims 51-70 are pending in the application.

Response to Arguments

Applicant's arguments filed July 11, 2007 have been fully considered but are not found persuasive in view of the ground(s) of rejection set forth in the present Office Action.

Applicant argues that the application and drawings support the claim language "wherein the first and second display areas are non-overlapping". The examiner respectfully disagrees with the argument. Applicant failed to provide support to his statement that the application and drawings support the claim language for the reasons given below.

In Remarks, Applicant pointed to the Fig. 2 and Fig. 3B of the specification. Fig. 2 shows an image having a size of $A*B$ and Fig. 3B shows an image of a size of $C*D$ wherein the icon completely lies in the display area overlapping with the image of a size $C*D$. The icon lies nowhere but overlapping with the image having a size $C*D$. Namely, the icons are overlapped with the image has a size fitting into a small display of the mobile display device. However, applicant's claim 51 requires that the icons are not overlapping with the image.

Applicant stated in Page 6 of Remarks that the second image in Fig. 3B has a height D and width C . Applicant further stated that the first image has the height B and width A . However, the icon in Fig. 3B lies within the second image area and thus overlaps with the first image area. The icon cannot be placed anywhere except overlapping/intersecting with the claimed first image

area. Applicant's claim 51 requires that the first and second display areas are non-overlapping. It is noted that claim 51 recites that "displaying at least first and second icons in a second display area" and "displaying a second image in a first display area of the display screen". Neither Applicant's Exhibit 1 nor Specification provides a support to the claim language set forth in the claim 51. However, nowhere in the specification discloses that "the first and second display areas are non-overlapping" as required by the claim 51 and similar claims.

It is acknowledged that applicant's submission of Exhibit 1 has been also considered. However, the sizes of the images set forth in the Exhibit 1 are different from the images in Figs. 2-3D as originally disclosed in applicant's specification. In an apparent effort to remedy the deficiencies in the specification with regards to the enablement requirements, applicant accordingly submitted Exhibit 1. However, the Exhibit 1 shows a first image of a different size from the first image in Fig. 2, which is inconsistent with the specification's statement that the first image has a height B and width A. Although applicant's creativity is appreciated, the Exhibit 1 redefines the first image to have a height C' and width D'. Applicant's original specification does not use notations for the sizes of the second image and the first image other than A, B, C and D. However, applicant's Exhibit 1 introduces some new notations C' and D' other than A, B, C and D and the original specification discloses the length of the display unit 103 is adjusted by adjusting the aspect ratio of the display unit 103 (See Paragraph 0025) and the image has to fit into the small display of the mobile display device.

Moreover, since Exhibit 1 introduces new notations and describes something in contrary to what have been disclosed in the original specification, the original specification is relied upon in consideration of the claim 51's claim languages. For the same reason discussed above, the

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Exhibit 1 cannot be used in lieu of applicant's specification to support the relationship $D=A \cdot A/B$. Moreover, the Exhibit 1 is not a part of the original specification and was provided during the prosecution of the present application. Exhibit 1 cannot be used to support the claim limitations set forth in the claim 51 for the reasons that the images in Exhibit 1 do not show the claimed icons set forth in the claim 51. Exhibit 1 does not support the claim language that "the second image is displayed in entirety in the first display area of the display screen" and thus has nothing to do with the claim limitations set forth in the claim 51. If the Exhibit 1 were to be accepted as a supplement to the specification otherwise, it would lead to a contradiction with the original specification's disclosure. Moreover, the images in Exhibit 1 are not even related to the display areas in a mobile communication device. Exhibit 1 does not provide further clarification to the claimed feature of non-overlapping between the first image area and the second image area. Therefore, Exhibit 1 is deficient and does not provide any clarification to the claim languages set forth in the claim 51.

Applicant argues that Uyehara is not directed to viewing "a photographic image" as claimed. However, Uyehara discloses graphics images in column 4, lines 60-67 and graphics image includes a photographic image.

Applicant argues in Item 2 in Page 7 with respect to the claim limitation that "the first and second display areas are non-overlapping". However, this limitation is not even supported by applicant's specification.

Applicant argues with respect to the claim limitation in the claim 57 that "the second image has approximately same aspect ratio as the first image". Applicant's Fig. 2 and Fig. 3B

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discloses the first image having a width A and height B and the second image having a width C and height D in a mobile communication display having the same size of the display screen (as a matter of fact, according to applicant's embodiment in Fig. 2 and Fig. 3B, C=A and D=B as evidenced in applicant's originally filed claim 13 in which the length A is adjusted in size to be the length C and the originally filed claim 1 also recites changing the size of the first image to the size of the second image). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Nothing can be found in the figures as to the second image has been sized differently. This feature is exactly the same as Uyehara's portrait and landscape modes for displaying the images (texts are also images when displayed) in which the length of the second image is adjusted in size from the length of the first image. Uyehara discloses in column 4, lines 60-65 the graphics image which includes a photographic image. Thus, in Uyehara, the rotation of images is not necessarily limited to the text images in the figures. The graphics images can be rotated as similar to the text images. Therefore, Uyehara meets the claim limitation that the second image has approximately same aspect ratio as the first image, as set forth in the claim 57.

USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). *In re Prater*, 415 F.2d 1393,

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1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (“During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.”).

Applicant argues that Uyehara is only concerned with changing the orientation of the displayed text, it does not suggest adjusting the image size so that it fits in the display. However, adjusting the image size so that it fits in the display means that the second image necessarily has the size $C=A$ and $D=B$. Applicant’s original specification lacks a showing that the second image and the first image are sized according to the notations other than A, B, C and D. Applicant argues that the produced result is not a rotated version of the same “photographic image” adjusted in size to fit in the display. This argument does not make sense. The first image and the second image are recited in the claims and the second image does not have to be exactly the same as the first image, as required by the claims. Uyehara’s Fig. 18 clearly shows a second image that is a rotated version of the first image in Fig. 17 and the second image in Fig. 18 is adjusted in length from the first image in Fig. 17 because the claims do not require that the second image have to be the same as the first image or there has to be a one-to-one mapping relationship between the pixels of the first image and the pixels of the second image.

Applicant argues with respect to Uyehara and Register in Item 6 of Page 8 the claim limitation that “the first and second display areas are non-overlapping.” However, Fig. 2 shows an image having a size of $A*B$. Fig. 3B shows an image having a size of $C*D$ wherein the icon lies in the display area overlapping with the image having a size $C*D$. The icon lies nowhere but overlapping with the image having a size $C*D$. Applicant stated in Page 6 that the second image in Fig. 3B has a height D and width C . Applicant further stated that the first image has the height B and width A . However, the icon in Fig. 3B lies within the second image area and thus overlaps with the second image area. Applicant’s claim 51 requires that the first and second display areas are non-overlapping. It is noted that claim 51 recites that “displaying at least first and second icons in a second display area” and “displaying a second image in a first display area of the display screen”. However, nowhere in the specification discloses that “the first and second display areas are non-overlapping” as required by the claim 51 and similar claims.

In response to applicant’s argument that the cited Register is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Register discloses a set of soft icons on the display screen of a handheld device. Whether Register has to toggle buttons outside the display screen does not matter. The embodiment of a set of soft icons meet the claim limitation of “icons” set forth in the claims. Moreover, applicant’s claim 51 does not recite any functionality associated with the claimed icons. Applicant’s claim 51 only requires the display area for icons to be non-overlapping with the display area for the image. However, applicant argues with respect to

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the functionalities of the icons, i.e., the selection of icons by arguing that Register requires to toggle a single button toward a first direction that allows a user to choose a first soft icon.

However, applicant's claim 51 is not related to the selection of icons whatsoever. Applicant's argument is irrelevant to the claim limitations set forth in the claim 51 and similar claims.

Applicant argues with respect to the combination of Uyehara and Register for the obviousness rejection set forth in the previous Office Action by arguing that Uyehara's filing post dates that of Register's by about three years. At the time the claimed invention was made, Uyehara and Register has taught the claim limitations set forth in the claim 51 and similar claims. Moreover, Register is published long time before Uyehara and thus Uyehara is aware of the Register's teaching at the time Uyehara made his invention. Uyehara does not have to repeat Register's experimentation. Finally, the filing dates of both references are prior to the applicant's filing date. The prior art references can be combined accordingly with the motivations to combine the references.

Applicant argues that Applicant invites the Examiner to point out the alleged motivation to combine the references. However, the Office Action clearly cited the motivation to combine the references. According to MPEP, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's

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disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

In the present case, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to have placed the software controlled markers of Uyebara outside the images to be rotated according to the teaching of Register that the soft keys are placed outside of the images to be rotated. Both references teach the rotation of the images in accordance with the icons or soft keys. Placing the soft keys or icons outside the images to be rotated is old and well known in the art as evidenced in the Register's reference. Uyebara teaches or suggests the claim limitation by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated.

Moreover, whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys/icons on the mobile device can be changed. As to the use of the keys/icons instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue commands to control the image orientation performing the same function of the keys. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method allowing a user to select the icons outside of the images in order not to obscure the images with the icons and these motivation statements can be found in Register and Uyebara (See Uyebara Figs. 17-18 and column 6, lines 21-36 and Register Figs. 4-5) because Uyebara teaches or suggests the claim

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limitation of the icons to be non-overlapping with the displayed images by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated.

As address below, the Claim 1 is unpatentable over Uyehara et al. U.S. Patent No. 6,154,214 (hereinafter Uyehara) in view of Register U.S. Patent No. 5,661,632 (hereinafter Register).

As addressed below, Uyehara discloses a method of controlling image display on a hand-held mobile communication terminal, the method comprising:

Displaying a first image on a display screen of a hand-held mobile communication terminal configured to communicate voice data in a wireless communication network (*column 4, lines 60-65 and column 5, lines 1-10 wherein the device plays sound clips and includes a speech synthesizer to communicate audible output or digital audio signals; column 4, lines 35-50 wherein the device directly downloads graphics images from the Internet*), wherein the first image comprises a photographic image (*column 4, lines 60-65 wherein the graphics image includes a photographic image*);

Displaying a second image in a first display area of the display screen (Figs. 17-18), in response to a user interacting with the mobile communication terminal to affirmatively control at least a first and a second direction of rotation for an image displayed on the display screen (column 12, lines 1-33), wherein the second image comprises a rotated version of the first image relative to the display screen (Figs. 17-18),

Wherein at least one of a first length and a second length of the second image is adjusted in size so that the second image is displayed in entirety in the first display area of the display screen (Due to 112 rejection, the limitation is given the broadest reasonable interpretation, see Figs. 17-18), and

Displaying at least first and second icons in a second display area of the display screen (Fig. 17 discloses four fixed icons; see column 6, lines 9-20), wherein the first and second display areas are non-overlapping (rotation icon 80 is non-overlapping with the image having the text area; see Figs. 17-18; additionally the soft keys/icons are overlapped with the image having the text area) and the second display area is positioned between the first display area and at least one edge of the display screen (Figs. 17-18), and wherein the first and second icons are associated with a function for controlling image display on the hand-held mobile communication terminal (column 12).

In other words, Uyehara further discloses rotating a first image displayed on the display unit (*e.g., rotating the first image displayed on the Fig. 17*), in a first direction (*e.g., in a portrait mode*) relative to the display unit, to display a second image (*in response to the user's pressing of the orientation key 80 to display a second image in landscape mode*) and adjusting dimension and orientation of the second image relative to dimensions of the display unit (*the dimensional configuration of the image displayed in Fig. 18 are different from the dimensional configuration of the first image displayed in Fig. 17 in the portrait mode and the texts are redisplayed with the orientation shown in Fig. 18, see column 12. Adjusting the display orientation of the first image also adjusts the dimensional configuration of the second image in Fig. 18 in accordance with the width and height of the display unit*).

Uyehara discloses an orientation key 80 and a plurality of software controlled markers 240-246 in response to the pressing of the orientation key 80 to control the rotation orientation of the image. The markers are software control keys (soft keys) in which the user can tap or touch (e.g., column 12, lines 20-21 and column 12, lines 50-57). The plurality of markers include a first and second orientation markers performing the same function as the first and second direction keys of performing clockwise or counter-clockwise rotation of the image (See column 6, lines 10-36). The plurality of markers also include a third and fourth orientation markers performing the same function as the third and fourth direction keys of performing 180 degree rotation or 0 degree rotation to return to its original orientation (column 6, lines 21-36). These four markers are software controlled to indicate direction or orientation in which the first image in Fig. 17 is rotated.

Although Uyehara does not explicitly disclose the graphical orientation markers 240-246 are not overlapping with the image having the text area, Uyehara explicitly teaches the rotation icon and hotkey icon 82 are displayed in a second display area. However, Fig. 2 shows an image having a size of $A*B$ and Fig. 3B shows an image having a size of $C*D$ wherein the icon lies in the display area overlapping with the image having a size $C*D$. The icon lies nowhere but overlapping with the image having a size $C*D$. Applicant stated in Page 6 that the second image in Fig. 3B has a height D and width C . Applicant further stated that the first image has the height B and width A . However, the icon in Fig. 3B lies within the second image area and thus overlaps with the second image area. Applicant's claim 51 requires that the first and second display areas are non-overlapping. It is noted that claim 51 recites that "displaying at least first and second icons in a second display area" and "displaying a second image in a first display area of the

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display screen”. However, nowhere in the specification discloses that “the first and second display areas are non-overlapping” as required by the claim 51 and similar claims.

In the interest of compact prosecution of the case, the examiner has provided the art rejection in light of the cited references and the 112 rejection set forth in the present Office Action.

Register discloses icons are separately displayed from the image areas (See Register Figs. 4-5).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have placed the software controlled markers of Uyehara outside the images to be rotated according to the teaching of Register that the soft keys are placed outside of the images to be rotated. Both references teach the rotation of the images in accordance with the icons or soft keys. Placing the soft keys or icons outside the images to be rotated is old and well known in the art as evidenced in the Register’s reference. Uyehara teaches or suggests the claim limitation by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated.

Moreover, whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys/icons on the mobile device can be changed. As to the use of the keys/icons instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue commands to control the image orientation performing the same function of the keys. One of the

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ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method allowing a user to select the icons outside of the images in order not to obscure the images with the icons and these motivation statements can be found in Register and Uyehara (See Uyehara Figs. 17-18 and column 6, lines 21-36 and Register Figs. 4-5) because Uyehara teaches or suggests the claim limitation of the icons to be non-overlapping with the displayed images by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 51-70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For example, the base claim 51 recites, "at least one of a first length and a second length of the second image is adjusted in size so that the second image is displayed in entirety in the first display area of the display screen" and "wherein the first and second display areas are non-overlapping." The claim 52 recites "wherein the first image and the second image have approximately same aspect ratio."

However, according to applicant's specification, the aspect ratio of the second image is different from the aspect ratio of the first image (See for example Paragraph 0024-0027 of the applicant's specification). Moreover, the first length and the second length of the second image cannot be determined from applicant's specification as it is not clear what the claimed length means (width or height?). Finally, applicant's specification does not support the limitation of "wherein the first and second display areas are non-overlapping" set forth in the claims 51-56, 58-59 and 61.

However, Fig. 2 shows an image having a size of $A*B$ and Fig. 3B shows an image having a size of $C*D$ wherein the icon lies in the display area overlapping with the image having a size $C*D$. The icon lies nowhere but overlapping with the image having a size $C*D$. Applicant stated in Page 6 that the second image in Fig. 3B has a height D and width C . Applicant further stated that the first image has the height B and width A . However, the icon in Fig. 3B lies within the second image area and thus overlaps with the second image area. Applicant's claim 51 requires that the first and second display areas are non-overlapping. It is noted that claim 51 recites that "displaying at least first and second icons in a second display area" and "displaying a second image in a first display area of the display screen". However, nowhere in the specification discloses that "the first and second display areas are non-overlapping" as required by the claim 51.

The claims 52-56 depend upon the claim 51 and are rejected due to their dependency on the claim 51.

The claim 57 further recites "wherein at least one of a width and a height of the second image is adjusted in size so that the second image is displayed in the first display area, and wherein the second image has approximately same aspect ratio as the first image." However, the

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second image has approximately same aspect ratio as the first image implies that a width and a height of the second image is not adjusted in size and thus the limitation is not supported by applicant's specification.

The claim 58 is also subject to the same rationale of rejection set forth in the claim 51.

The claims 58-63 depend upon the claim 57 and are rejected due to their dependency on the claim 57.

The claim 64 recites "wherein at least one of a first length and a second length of the second image is adjusted in size for the second image to be displayed in a first display area of the display screen so that the second image has approximately same aspect ratio as the first image" and "wherein at least one of a first length and a second length of the third image is adjusted in size for the third image to be displayed in the first display area of the display screen so that the third image has approximately same aspect ratio as the second image". The claim 64 is subject to the same rationale of rejection set forth in the claim 57.

The claims 65-70 depend upon the claim 64 and are rejected due to their dependency on the claim 64.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 53 and 60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim 53 recites, “the first length of the second image is approximately equal to a first length of the display screen, and the second length of the second image is approximately equal to square of the first length of the display screen divided by a second length of the display screen.” However, this limitation is in direct contradictory with the limitation that “the first image and the second image have approximately same aspect ratio” set forth in the claim 52 upon which the claim 53 is dependent. Clarification is required.

The claim 60 is subject to the same rationale of rejection set forth in the claim 53.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 51-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uyehara et al. U.S. Patent No. 6,154,214 (hereinafter Uyehara) in view of Register U.S. Patent No. 5,661,632 (hereinafter Register).

Re Claim 51:

Uyehara discloses a method of controlling image display on a hand-held mobile communication terminal, the method comprising:

Displaying a first image on a display screen of a hand-held mobile communication terminal configured to communicate voice data in a wireless communication network (*column 4*,

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lines 60-65 and column 5, lines 1-10 wherein the device plays sound clips and includes a speech synthesizer to communicate audible output or digital audio signals; column 4, lines 35-50 wherein the device directly downloads graphics images from the Internet), wherein the first image comprises a photographic image (column 4, lines 60-65 wherein the graphics image include a photographic image);

Displaying a second image in a first display area of the display screen (Figs. 17-18), in response to a user interacting with the mobile communication terminal to affirmatively control at least a first and a second direction of rotation for an image displayed on the display screen (column 12, lines 1-33), wherein the second image comprises a rotated version of the first image relative to the display screen (Figs. 17-18),

Wherein at least one of a first length and a second length of the second image is adjusted in size so that the second image is displayed in entirety in the first display area of the display screen (Due to 112 rejection, the limitation is given the broadest reasonable interpretation, see Figs. 17-18), and

Displaying at least first and second icons in a second display area of the display screen (Fig. 17 discloses four fixed icons; see column 6, lines 9-20), wherein the first and second display areas are non-overlapping (rotation icon 80 is non-overlapping with the image having the text area; see Figs. 17-18; additionally the soft keys/icons are overlapped with the image having the text area; column 12, lines 1-35 and column 6, lines 9-20) and the second display area is positioned between the first display area and at least one edge of the display screen (Figs. 17-18; column 12, lines 1-35 and column 6, lines 9-20), and wherein the first and second icons are

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associated with a function for controlling image display on the hand-held mobile communication terminal (column 12, lines 1-35 and column 6, lines 9-20).

In other words, Uyehara further discloses rotating a first image displayed on the display unit (*e.g., rotating the first image displayed on the Fig. 17*), in a first direction (*e.g., in a portrait mode*) relative to the display unit, to display a second image (*in response to the user's pressing of the orientation key 80 to display a second image in landscape mode*) and adjusting dimension and orientation of the second image relative to dimensions of the display unit (*the dimensional configuration of the image displayed in Fig. 18 are different from the dimensional configuration of the first image displayed in Fig. 17 in the portrait mode and the texts are redisplayed with the orientation shown in Fig. 18, see column 12. Adjusting the display orientation of the first image also adjusts the dimensional configuration of the second image in Fig. 18 in accordance with the width and height of the display unit*).

Uyehara discloses an orientation key 80 and a plurality of software controlled markers 240-246 in response to the pressing of the orientation key 80 to control the rotation orientation of the image. The plurality of markers are software control keys (soft keys) in which the user can tap or touch (*e.g., column 12, lines 20-21 and column 12, lines 50-57*). The plurality of markers include a first and second orientation markers performing the same function as the first and second direction keys of performing clockwise or counter-clockwise rotation of the image (See column 6, lines 10-36). The plurality of markers also include a third and fourth orientation markers performing the same function as the third and fourth direction keys of performing 180 degree rotation or 0 degree rotation to return to its original orientation (column 6, lines 21-36).

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These four markers are software controlled to indicate direction or orientation in which the first image in Fig. 17 is rotated.

Although Uyehara does not explicitly disclose the graphical orientation markers 240-246 are not overlapping with the image having the text area, Uyehara explicitly teaches the rotation icon and hotkey icon 82 are displayed in a second display area.

Register discloses icons are separately displayed from the image areas (See Register Figs. 4-5).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have placed the software controlled markers of Uyehara outside the images to be rotated according to the teaching of Register that the soft keys are placed outside of the images to be rotated. Both references teach the rotation of the images in accordance with the icons or soft keys. Placing the soft keys or icons outside the images to be rotated is old and well known in the art as evidenced in the Register's reference. Uyehara teaches or suggests the claim limitation by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated. Uyehara at least teaches some icons are outside the display images to be rotated (See Figs. 17-18).

Moreover, whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys/icons on the mobile device can be changed. As to the use of the keys/icons instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue

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commands to control the image orientation performing the same function of the keys. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method allowing a user to select the icons outside of the images in order not to obscure the images with the icons and these motivation statements can be found in Register and Uyehara (See Uyehara Figs. 17-18 and column 6, lines 21-36 and Register Figs. 4-5) because Uyehara teaches or suggests the claim limitation of the icons to be non-overlapping with the displayed images by teaching in Figs. 17-18 that the orientation icons/keys 80 are outside of the display images to be rotated.

Claim 52:

Uyehara is silent to the claim limitation "wherein the first image and the second image have the approximately same width-height aspect ratio."

Uyehara discloses the first image in Fig. 17 having a height C and a width D and the displayed image of Fig. 18 also has height C and width D. In view of the above teaching of Uyehara, the second image in Fig. 18 has the same width-height aspect ratio as the first image in Fig. 17. Therefore, Uyehara at least implicitly teaches or suggests the claim limitation wherein the second image has the same width-height aspect ratio as the first image.

One of the ordinary skill in the art would have been motivated to maintain the same width-height aspect ratio for the rotated second image as the first image such that the original image remains un-scaled while being rotated (See Register Figs. 1-5 and Uyehara Figs. 17-18).

Claim 54:

The claim 54 encompasses the same scope of invention as that of the claim 51 except additional claim limitation that the first and second icons are displayed in the second display area, in response to user interaction with the hand-held mobile communication terminal.

However, Register further discloses the claim limitation that the first and second icons are displayed in the second display area, in response to user interaction with the hand-held mobile communication terminal (*Register Figs. 4-5 wherein the first and second icons in Fig. 5 are displayed in the second display area in response to user interaction with the hand-held mobile communication terminal in Fig. 4*).

Claim 55:

The claim 55 encompasses the same scope of invention as that of the claim 51 except additional claim limitation that the user interaction with the hand-held mobile communication terminal comprises changing a display orientation of a displayed image in the first area relative to the hand-held mobile communication terminal. However, Register further discloses the claim limitation that the user interaction with the hand-held mobile communication terminal comprises changing a display orientation of a displayed image in the first area relative to the hand-held mobile communication terminal (*Register Figs. 4-5; column 3, lines 1-10 and column 4, lines 1-15*).

Claim 56:

The claim 56 encompasses the same scope of invention as that of the claim 51 except additional claim limitation of a soft key. However, Register and Uyehara further discloses the claim limitation of a soft key (Register Figs. 4-5 and Uyehara Figs. 17-18; column 6, lines 9-20).

Re Claims 57 and 64:

Uyehara teaches a method of controlling image display on a hand-held mobile communication terminal, the method comprising:

Displaying a first image on a display screen of a hand-held mobile communication terminal in a first orientation relative to the display screen (See Figs. 17-18), wherein the first image comprises a photographic image (See column 4, lines 60-65);

Displaying a second image in a first display area of the display screen in response to a user interacting with at least one key (e.g., softkeys, hotkey, orientation key etc; column 12, lines 1-35 and column 6, lines 9-20) on a keypad (touch keypad) of the hand-held mobile communication terminal, wherein the second image comprises the first image displayed in a second orientation relative to the display screen, wherein the second orientation is different from the first orientation (Figs. 17-18; column 12, lines 1-35 and column 6, lines 9-20),

Wherein at least one of a width and a height of the second image is adjusted in size so that the second image is displayed in the first display area, and wherein the second image has approximately same aspect ratio as the first image (Figs. 17-18).

Uyehara is silent to the claim limitation "wherein the first image and the second image have the approximately same width-height aspect ratio" and "a keypad".

Register teaches a method of controlling image display on a hand-held mobile communication terminal, the method comprising:

Displaying a first image on a display screen of a hand-held mobile communication terminal in a first orientation relative to the display screen (See Figs. 4-5), wherein the first image comprises a photographic image (See Figs. 4-5);

Displaying a second image in a first display area of the display screen in response to a user interacting with at least one key on a keypad of the hand-held mobile communication terminal (column 3-4 and Figs. 4-5 having keys on a keypad), wherein the second image comprises the first image displayed in a second orientation relative to the display screen, wherein the second orientation is different from the first orientation (Figs. 4-5),

Wherein at least one of a width and a height of the second image is adjusted in size so that the second image is displayed in the first display area, and wherein the second image has approximately same aspect ratio as the first image (Figs. 4-5).

Uyehara discloses the first image in Fig. 17 having a width C and a height D and the displayed image of Fig. 18 also has width C and height D. In view of the above teaching of Uyehara, **the second image in Fig. 18 has the same width-height aspect ratio as the first image in Fig. 17.** Therefore, Uyehara at least implicitly teaches or suggests the claim limitation wherein the second image has the same width-height aspect ratio as the first image.

One of the ordinary skill in the art would have been motivated to maintain the same width-height aspect ratio for the rotated second image as the first image such that the original image remains un-scaled while being rotated (See Register Figs. 1-5 and Uyehara Figs. 17-18; column 12, lines 1-35 and column 6, lines 9-20).

Claim 58:

Although Uyehara does not explicitly disclose the graphical orientation markers 240-246 are not overlapping with the image having the text area, Uyehara explicitly teaches the rotation icon and hotkey icon 82 are displayed in a second display area.

Register discloses icons are separately displayed from the image areas (See Register Figs. 4-5).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have modified the software controlled markers of Uyehara with any forms of keys. Whatever arrangement/placement of the keys on the mobile device do not matter as long as they are used to perform the same functions, i.e., rotating the image in clockwise direction, counter-clockwise direction etc. One of the ordinary skill in art realizes that locations for placing the keys/icons on the mobile device can be changed. As to the use of the keys/icons instead of the orientation key in combination with the markers, one of the ordinary skill in the art realizes that markers are software controlled markers which can be tapped to issue commands to control the image orientation performing the same function of the keys. One of the ordinary skill in the art would have been motivated to do this to select a text orientation which corresponds to the user's preferred device orientation and gripping method (Uyehara column 6, lines 21-36 and Register Figs. 4-5).

Claim 59:

The claim 59 encompasses the same scope of invention as that of the claim 58 except additional claim limitation that the second display area is positioned between the first display

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area and at least one edge of the display screen. However, Uyehara further discloses the claim limitation that the second display area is positioned between the first display area and at least one edge of the display screen (Uyehara Figs. 17-18; Uyehara Figs. 17-18; column 12, lines 1-35 and column 6, lines 9-20).

Claim 61:

The claim 61 encompasses the same scope of invention as that of the claim 58 except additional claim limitation of a soft key. However, Register and Uyehara further discloses the claim limitation of a soft key (Register Figs. 4-5 and Uyehara Figs. 17-18 and column 6, lines 9-20).

Claim 62:

The claim 62 encompasses the same scope of invention as that of the claim 57 except additional claim limitation that the second orientation corresponds to a clockwise rotated version of the first image relative to the first orientation. However, Register and Uyehara further disclose the claim limitation that the second orientation corresponds to a clockwise rotated version of the first image relative to the first orientation (Register column 3, lines 5-10; Uyehara column 12, lines 1-35 and Figs. 17-18).

Claim 63:

The claim 63 encompasses the same scope of invention as that of the claim 57 except additional claim limitation that the second orientation corresponds to a counter-clockwise rotated version of the first image relative to the first orientation. However, Register and Uyehara further disclose the claim limitation that the second orientation corresponds to a counter-clockwise

rotated version of the first image relative to the first orientation (Register column 3, lines 5-10; Uyehara column 12, lines 1-35 and Figs. 17-18).

Claim 65:

The claim 65 encompasses the same scope of invention as that of the claim 64 except additional claim limitation that the second direction is opposite to the first direction. However, Register and Uyehara further disclose the claim limitation that the second direction is opposite to the first direction (Register column 3, lines 5-10; Uyehara column 12, lines 1-35 and Figs. 17-18).

Claim 66:

The claim 66 encompasses the same scope of invention as that of the claim 64 except additional claim limitation that the first direction corresponds to a clockwise direction of rotation. However, Register and Uyehara further disclose the claim limitation that the first direction corresponds to a clockwise direction of rotation (Register column 4, lines 1-13; Uyehara column 12, lines 1-35 and Figs. 17-18).

Claim 67:

The claim 67 encompasses the same scope of invention as that of the claim 64 except additional claim limitation that the first direction corresponds to a counter-clockwise direction of rotation. However, Register and Uyehara further disclose the claim limitation that the first direction corresponds to a counter-clockwise direction of rotation (Register column 3, lines 1-10; Uyehara column 12, lines 1-35 and Figs. 17-18).

Claim 68:

The claim 68 encompasses the same scope of invention as that of the claim 66 except additional claim limitation that the first direction corresponds to a counter-clockwise direction of rotation. However, Register and Uyehara further disclose the claim limitation that the first direction corresponds to a counter-clockwise direction of rotation (Register column 3, lines 1-10; Uyehara column 12, lines 1-35 and Figs. 17-18).

Claim 69:

The claim 69 encompasses the same scope of invention as that of the claim 66 except additional claim limitation that the first direction corresponds to a clockwise direction of rotation. However, Register and Uyehara further disclose the claim limitation that the first direction corresponds to a clockwise direction of rotation (Register column 4, lines 1-13; Uyehara column 12, lines 1-35 and Figs. 17-18).

Claim 70:

The claim 70 encompasses the same scope of invention as that of the claim 67 except additional claim limitation of displaying a soft key on the display screen, wherein the soft key is associated with a function for controlling image display on the hand-held mobile communication terminal. However, Register and Uyehara further discloses the claim limitation of displaying a soft key on the display screen, wherein the soft key is associated with a function for controlling image display on the hand-held mobile communication terminal (Register Figs. 4-5; Uyehara column 12, lines 1-35 and Figs. 17-18).

Re Claims 53 and 60:

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Register discloses the second image in Fig. 5 has a width C and a height D and the first image in Fig. 4 has width A and a height B in which the width C of the second image corresponds with the width A of the display and the height D of the second image corresponds with the height B. It would have been obvious to see from the first image of Fig. 4 and the second image of Fig. 5 to see C is approximately equal to A and D is approximately equal to B. Thus, D is approximately equal to $A \cdot A/B$ as claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jcw

